

COUNTY BOROUGH OF BIRKENHEAD



ANNUAL REPORT
OF THE
MEDICAL OFFICER
FOR
1939

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Medical Officer of Health;

Chief Medical Officer for the Municipal Tuberculosis, Mental Deficiency,
Maternity and Child Welfare, &c., Schemes, and for the School Medical Service
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P R E F A C E

In accordance with the suggestion contained in Circular 2067 (England), dated 19th July, 1940, issued by the Ministry of Health, my Annual Report for 1939 has been considerably curtailed, and is in the nature of an interim report.

The duties in connection with the Civil Defence Medical Service have occupied a great proportion of the time of the staff of the department. Upon the declaration of war, several members of the staff were seconded to this branch with the result that the general sectional work of the department was greatly restricted. Again, evacuation of mothers, children, blind persons, etc., entailed a large amount of the time of the staff.

I should like to express my appreciation of the unfailing loyalty and industry of members of my staff in the arduous times which were experienced in the latter part of the year.

D.M.M.

POPULATION, BIRTHS, AND DEATHS

POPULATION

Population.—The population of the Borough, as recorded at the time of the 1931 census was 147,803.

The Registrar-General has estimated the population of the Borough as at mid-year 1939 as follows:—

for calculation of birth rate 143,000

for calculation of death rate 139,800

and the following rates are based on these figures.

BIRTHS

Births registered during 1939, and birth rate.—During the year 2,405 live births belonging to the Borough were *registered*.

The live birth rate for 1939 was 16.8.

Birth rate in recent years.—The birth rates since 1931 are as follows:—

1931	18.4 per 1,000
1932	17.7 „
1933	16.4 „
1934	16.8 „
1935	17.0 „
1936	16.4 „
1937	16.3 „
1938	17.0 „
1939	16.8 „

Still births.—In addition to live births, 118 still births belonging to Birkenhead were registered, in accordance with Section 7 of the Births and Deaths Registration Act, 1926. This is equivalent to a still birth rate of 0.82.

Comparison of birth rate with rates for country generally:—

	Per 1,000 of population	
	Live births	Still births
England and Wales	15.0	0.59
126 County Boroughs and Great Towns (including London)	14.8	0.59
148 smaller towns (estimated resident populations 25,000 to 50,000 at census, 1931)	15.6	0.57
London Administrative County	12.3	0.44
Birkenhead	16.8	0.82

Sex-distribution of births.—Of the 2,405 live births, 1,198 were males and 1,207 females; a proportion of 1,000 : 1,007.

Legitimacy.—Of the 2,405 live births registered 98 were illegitimate, a percentage of 4.07.

Registration of stillbirths.—The 118 stillbirths registered were classified as follows:—

Legitimate—Males	58
Females	50
Illegitimate—Males	4
Females	6
	<hr/>
	118
	<hr/>

The stillbirth rate was 47 per 1,000 total births.

Births notified during 1939.—During the year, 2,531 births were notified in the Borough under Section 203 of the Public Health Act, 1936. Of these, 110 were still births, leaving a total of 2,421 live births. This total includes births which occurred in the Birkenhead Maternity Hospital, the Birkenhead Municipal Hospital, and the Birkenhead General Hospital, many of which were transferable to other areas.

The following is an analysis of the above births:—

Births in Public Institutions:—

Birkenhead Maternity Hospital...	430	(25 stillbirths)
Birkenhead Municipal Hospital...	379	(32 „)
Birkenhead General Hospital	—	(— „)
Births in Nursing Homes	146	(5 „)

Other births:—

Notified by doctors	23	(1 „)
Notified by midwives	1441	(47 „)
Notified by parents	2	(— „)

2421 (110 stillbirths)

Un-notified births.—The Registrars reported 57 cases of un-notified births; 38 by both certified midwives and doctors, 18 by the Maternity Hospital staff, and 1 by the General Hospital staff.

DEATHS

Death-rate.—1,804 deaths occurred during the year; the total figure includes 118 deaths of Birkenhead residents which occurred outside the Borough, but excludes 263 deaths of non-residents which occurred in the area. This gives a death-rate of 12.9 per 1,000.

Standardised death-rate.—Though the above reflects the extent of death in Birkenhead it should not be used for the purpose of making comparisons with the position obtaining in other areas or in the country as a whole. The age and sex composition of compared areas must be taken into account before it is safe to make any deductions in regard

to the influence exercised upon the degree of mortality by social, economic or other factors. All other things being equal, an area with an excessive number of old people will necessarily have a higher death-rate than one in which younger people are relatively more preponderant. So also will an area with a greater proportion of males to females, since at almost all ages mortality is greater among the former.

It is therefore necessary to reduce age and sex distribution to a common level; that is, to adjust the distribution in a given area so as to make it comparable with the distribution in the whole country. In Birkenhead the difference from the average has the effect of making the death-rate more favourable than it would otherwise be. To make the rate properly comparable, therefore, it has to be multiplied by a factor representative of the proportion which the country's distribution bears to Birkenhead's distribution. This factor is 1.09; and the result of the adjustment is to raise the crude death-rate of 12.9 to 14.0. Comparison of the latter figure may be made with a similarly standardised rate for any other area, the influence of age and sex having in both cases been eliminated.

Deaths in recent years.—The death-rates since 1931 are as follows:

1931	13.4	per 1,000
1932	11.6	„
1933	13.5	„
1934	12.0	„
1935	12.5	„
1936	12.6	„
1937	13.0	„
1938	12.1	„
1939	12.9	„

Sex-distribution of deaths.—Of the total deaths, 983 were males and 821 females, a proportion of 1,197 : 1,000.

Uncertified deaths.—In 1939 there were no uncertified deaths belonging to the area.

Coroners' inquests.—Coroners' inquests were held regarding 111 deaths—that is, in 6.1 per cent. of the total deaths during the year.

The Coroners' (Amendment) Act, 1926.—This Act came into force on 1st May, 1927. During the year 74 deaths (4.1 per cent. of the total deaths during the year) were registered without the Coroner holding an inquest.

Infantile mortality.—There were 139 deaths of infants under 1 year old. This corresponds to an infantile mortality rate of 58 per 1,000 births, the lowest rate yet recorded in the area.

There were 10 deaths in illegitimate infants under 1 year old; giving an illegitimate mortality rate of 103 per 1,000.

The infant mortality rates for each year since 1931 are given below:

1931	86
1932	71
1933	99
1934	60
1935	67
1936	63
1937	77
1938	75
1939	58

The main causes of infant deaths during the past two years are shown below:—

	No. in 1938	No. in 1939
(a) Pneumonia (all forms)	39	27
Bronchitis	5	3
Whooping cough	8	1
Measles	9	1
Diarrhoea and enteritis	29	20
(b) Premature birth	39	36
(c) All other causes	57	51
	—	—
	186	139
	—	—

Deaths from tuberculosis.—Tuberculosis was responsible for 7.7 per cent of all the deaths recorded in the Borough in 1939. The deaths from the disease were as follows:—

Deaths from tuberculosis of the lungs	126
Deaths from other forms of tuberculosis	13
	—
	139
	—

This gives a tuberculosis death-rate of 1.0 per 1,000 of the population.

Of the 126 deaths from respiratory tuberculosis during 1939, 118 occurred in persons between 15 and 65 years old—that is, of a wage-earning age.

Deaths from certain epidemic diseases.—The seven “ principal epidemic diseases ” caused 40 deaths, as follows:—

Diarrhoea and enteritis (under 2 years)	19
Whooping cough	1
Measles	1
Scarlet fever	1
Diphtheria (including membranous croup)	17
Fever (enteric, typhus, and simple continued)...	1
Smallpox	—

This corresponds to a death-rate from all these diseases of 0.28 per 1,000 of the population.

Deaths from other notifiable infectious diseases.—Pneumonia caused, in its various forms, 109 deaths; cerebro-spinal fever, 3; encephalitis lethargica, 4; dysentery, 1.

WATER SUPPLY, FOOD, AND DRUGS

WATER SUPPLY

During the year, 91 samples of water from the Alwen supply were bacteriologically examined in the Laboratory of the department.

MILK SUPPLY

231 samples of milk from farms, etc., outside the Borough were taken by the Veterinary Officer during the year and submitted for biological examination at the Municipal Laboratory. 21 of these (approximately 9%) were found to contain living tubercle bacilli. Appropriate action was taken.

The Veterinary Officer paid quarterly visits to the 7 herds in the Borough which are accredited, and made 640 clinical examinations of dairy cattle.

202 samples of milk were examined bacteriologically at the Municipal Laboratory during the year. 177 of these samples were satisfactory, and 25 unsatisfactory. Suitable action was taken with regard to the unsatisfactory samples.

OTHER FOOD : DRUGS

During the year, 145,901 animals were slaughtered in the area, an increase of 11,749 over the preceding year.

The total amount of meat condemned during the year was 222 tons.

Foodstuffs amounting to 5,210 lbs., 2 cases of eggs and 106 tins of meat and fruit, found to be unfit for human consumption, were also condemned.

A case of anthrax occurred in a cow, and the animal was slaughtered. Five other cows died suddenly, but negative results were returned.

During 1939, 501 samples were taken under the Food and Drugs Acts. Of these 258 were formal and 243 informal. 249 were samples of milk.

Of the total number of samples analysed 44 were reported adulterated, and proceedings were taken in respect of 5 of these. Fines were inflicted in 4 cases, the other case being dismissed.

TUBERCULOSIS

No changes of any importance occurred in the scheme for the treatment of tuberculosis.

Institutional accommodation for Birkenhead cases was available during the year, as in 1938.

The number of cases on the Notification Register at the end of the year was 1,252. Of these 791 (434 males and 357 females) were suffering from respiratory tuberculosis, and 461 (220 males and 241 females) were suffering from non-respiratory tuberculosis.

The number of cases on the Clinic Register at the end of the year was 918. Of these 571 (308 males and 263 females) were suffering from respiratory tuberculosis, and 347 (167 males and 180 females) were suffering from non-respiratory tuberculosis.

During the year the Tuberculosis Clinic was removed to more commodious and better-adapted premises.

VENEREAL DISEASES

During the year, 640 persons were dealt with at the General Hospital Clinic (493 males and 147 females), and 31 children (10 males and 21 females) were dealt with at the Hamilton Square Clinic.

The total number of attendances made at the General Hospital Clinic was 7,789 and at the Hamilton Square Clinic 225.

The total number of new cases seen at the General Hospital Clinic was 308 (260 males and 48 females).

9 patients (males) received inpatient treatment, the aggregate number of inpatient days being 316.

OTHER INFECTIOUS DISEASES

INFECTIOUS DISEASES WHICH ARE NOTIFIABLE

Below is a table showing the number of cases of infectious diseases (other than tuberculosis) notified during 1939, showing ages:—

Disease	under 1 yr.	1-2 yrs.	2-3 yrs.	3-4 yrs.	4-5 yrs.	5-10 yrs.	10-15 yrs.	15-20 yrs.	20-35 yrs.	35-45 yrs.	45-65 yrs.	65 yrs. up	Total
Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet fever	4	7	28	21	37	186	76	40	20	7	1	—	427
Diphtheria and membra- nous croup	7	12	22	16	26	116	53	19	21	5	3	—	300
Erysipelas	1	—	1	1	2	—	4	3	14	10	26	10	72
Typhus fever	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric fever	—	—	—	—	1	7	10	5	14	8	4	1	50
Continued fever	—	—	—	—	—	—	—	—	—	—	—	—	—
Relapsing fever	—	—	—	—	—	—	—	—	—	—	—	—	—
Cerebro-spinal meningitis	2	1	2	1	—	3	1	—	3	1	—	1	15
Encephalitis lethargica (acute)	—	—	—	—	—	—	—	—	—	—	—	—	—
Polio-encephalitis (acute)	—	—	—	—	—	—	—	—	—	—	—	—	—
Polionyelitis (acute) ..	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal pyrexia	—	—	—	—	—	—	—	1	21	3	—	—	25
Ophthalmia neonatorum	10	—	—	—	—	—	—	—	—	—	—	—	10
Cholera	—	—	—	—	—	—	—	—	—	—	—	—	—
Pneumonia	11	18	3	10	9	28	6	17	33	20	45	15	215
Malaria	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery	—	—	—	—	—	—	—	—	—	—	1	—	1
* Measles	1	1	4	1	1	2	1	1	—	—	—	—	12
* Whooping cough	2	4	2	3	4	1	—	—	—	—	—	—	16
Totals	38	43	62	53	80	343	151	86	126	54	80	27	1143

* Made notifiable under the Measles and Whooping Cough Regulations, dated October 23rd, 1939.

The number of patients treated in the Infectious Diseases Hospital during the year was as follows:—

In hospital at beginning of year	72	
Admitted to hospital during year	673	
	<hr/>	745
Discharged from hospital during year	692	
Number of deaths in hospital during year ...	20	
	<hr/>	712
Remaining in hospital at end of year		33
		<hr/>

An analysis of the cases dealt with during the year is given below:

TABLE I 3

Patients sent in as suffering from	In hospital at beginning of year	Admitted during year	Died during year	Discharged during year	Remaining in hospital at end of year
Scarlet fever .....M.	13	139	1	147	4
.....F.	24	169	..	186	7
Diphtheria.....M.	11	149	9	140	11
.....F.	21	142	6	147	10
Enteric fever .....M.	...	24	1	23	...
.....F.	1	24	...	25	...
Cerebro-spinal fever .....M.	...	7	2	5	...
.....F.	1	2	...	3	...
Erysipelas .....M.	1	1	...	2	..
.....F.	...	5	...	5	...
Measles .....M.	.	.	...	...	...
.....F.	...	2	...	1	1
Jaundice.....M.	...	...	...	...	...
.....F.	...	3	...	3	...
Other diseases .....M.	...	6	1	5	...
.....F.	...	..	...	...	...
Totals	72	673	20	692	33

Of the 48 cases notified as enteric fever admitted into the Infectious Diseases Hospital, the diagnosis was confirmed in 32 cases, one of which subsequently died. The final diagnosis in the remaining 16 cases were 1 enteritis, 1 influenza, 1 otitis media, 3 pyrexia, and 10 no disease.

A full investigation into these cases was made, but no common point of infection could be found. A number of the patients, however, had obtained their milk supply from the same source. Widal's, etc., taken from the retailer, members of his family and employees all proved negative.

MUNICIPAL LABORATORY

An additional Senior Laboratory Assistant was appointed during the year.

In August, examinations for the Wassermann Reaction (previously carried out at the Liverpool University) were made at the Laboratory. Up to the end of the year there were 679 examinations for this purpose.

During the year arrangements were made for various examinations to be carried out for the County Borough of Wallasey, in addition to those areas, etc., mentioned in my report for 1938.

The total number of examinations carried out at the Laboratory during the year was 22,274.

In connection with a case of anthrax which occurred in a cow in the area, a number of lairage employees who had been in contact with the animal were promptly dealt with and no human cases occurred.

In connection with the Merseyside War Blood Block, many samples of blood from would-be volunteer donors were examined. This has necessitated many visits to the places of employment of these volunteers in order to avoid loss of their working time.

During the year the Laboratory was removed to more commodious and better adapted premises.

BIRKENHEAD MUNICIPAL HOSPITAL

There were no changes in the administrative arrangements during the year.

The Medical Staff of the Hospital consisted of:—

The Medical Superintendent
Deputy Medical Superintendent
Senior Resident Medical Officer
Three Resident Medical Officers.

In addition the services of a:—

Consultant Radiologist
Physician
Aurist and Laryngologist
Psychiatrist
Orthopaedic Surgeon
Obstetrician and Gynaecologist, and
Ophthalmic Surgeon

were retained.

During the year a considerable number of medical, surgical and obstetric cases were dealt with at the Hospital, which is recognised by the General Nursing Council as a full training school for nurses, and by the Central Midwives Board as a Part 1 training school for the midwifery diploma.

The numbers of admissions and births are considerably lower than the previous year, the diminution being mainly accounted for by the onset of war in September. At this time the hospital was classified as a Class 1A hospital under the Ministry of Health's Emergency Scheme for treatment of civilian casualties resulting from air raids, and the admission of patients had to be restricted in order to comply with the regulations set out by the Ministry of Health at this time. In addition, it became necessary, from time to time, in accordance with the military situation, to empty certain wards and control admissions in anticipation of air raid casualties. It was also found necessary to make provision for two large male and female reception units and to arrange for an emergency operating theatre to be set up, owing to the imperfect arrangements for operative work which have now existed for several years at the hospital. Large quantities of medical and surgical stores were accumulated in anticipation of air raids. The above arrangements accordingly reduced the number of available beds existing at the hospital for the treatment of civilian sick, e.g., one surgical ward required to be converted into an emergency theatre, resulting in the loss of ten surgical beds.

Shortly after the commencement of war it was found necessary to undertake the evacuation of a large number of patients to other hospitals in order to set free beds for the immediate needs of the Borough. In view of the need for partly clearing the hospital from time to time, a partial embargo was placed on the admission of senile and infirm cases, many of whom could be perfectly well nursed at home. The number of such cases admitted has shown a very consider-

able increase during the past three years; it is, therefore, hoped that arrangements will be made by the Public Assistance Committee for the reception of such cases in some Institution where simple nursing care and supervision can be given, thus setting free important first-class accommodation at the hospital for the more urgent military and civil needs of the population.

Since the outbreak of war a large number of Navy, Army and Air Force personnel have been admitted to the hospital. We have been asked to reserve a certain number of beds for service cases admitted from the neighbourhood, and very considerable assistance has been afforded to all branches of the fighting services by the hospital. It is anticipated that there will be great difficulty in obtaining medical and trained nursing staff during the coming year owing to the requirements of the Forces. This deficiency is bound to increase as further emergency hospitals are set up throughout the country and young medical practitioners will in time be called up for Service requirements.

Large numbers of auxiliary nurses in the Civil Nursing Reserve have received training at the hospital during the year. It is hoped that their services will be available should the necessity arise to employ additional nursing staff if air raids occur. The training of these nurses is proceeding in a satisfactory manner and arrangements for revision classes are being made in order to give those who have already trained further hospital experience.

A considerable increase in the administrative work at the hospital has occurred following the outbreak of war; this is mainly due to the clerical work attached to the admission of Service cases, food rationing, etc., but, in spite of all these additions, the ordinary teaching and training of probationer nurses and pupil midwives has been carried out in the usual manner. The standard shown by nurses trained at the hospital at the recent examinations held by the General Nursing Council has been of a high order.

The closest co-operation between the hospital and other sections of the department has been maintained during the past year, great assistance in the diagnosis and treatment of cases being rendered, particularly by the Pathological Laboratory.

The following table shows the number of admissions, births, discharges and deaths during the year 1939:—

	Men	Women	Children	Total
In Hospital on 31st December, 1938	174	140	99	413
Admissions :				
From own homes and other Hospitals ...	1436	1978	724	4138
Service cases admitted	58	—	—	58
From Birkenhead Institution	34	27	16	77
Eastham House	7	4	—	11
Scattered Homes	—	—	9	9
Births in Hospital	—	—	378	378
Total cases dealt with	1709	2149	1226	5084

Discharges :

To own homes or other Hospitals	1150	1677	1064	3891
Service cases discharged	48	—	—	48
To Birkenhead Institution	66	59	28	153
To Scattered Homes	—	—	10	10
Deaths in Hospital	325	276	67	668
Total discharges and deaths	1589	2012	1169	4770
Cases in Hospital on 31st December, 1939	110	137	57	304
Service cases on 31st December, 1939	10	—	—	10
Total cases in Hospital on 31st Dec., 1939	120	137	57	314

The total number of surgical operations carried out during the year was as follows:—

Operations performed under general, spinal and local anaesthetics	1261
Operations for tonsils and adenoids—	
School Medical Service	18
Others	7
	— 25
Eye operations	30
Nasal operations	7
Dental operations	—

Below is a summary of the maternity cases dealt with at the Hospital during 1939:—

Total No. of women dealt with	Married	Single	Total No. of children dealt with	Live births	Still births
406	368	38	415	379	36

A summary of the work carried out at the X-Ray Department during 1939 is set out below:—

In-patients

X-Ray examinations made of:—

Stomach	222
Kidney	103
Chest	1270
Gall bladder	55
General	676
	— 2326

X-Ray films used	4362
Screenings	1356

Out-patients

T.B. cases	487	
Casualties	6	
Orthopaedic cases	48	
Ear, nose and throat cases	2	
Continuation cases	43	
Other cases	19	
Obstetric cases	8	
	<hr/>	613
War Casualties (in and out-patients)...		11

264 patients received ophthalmic examinations and treatment during the year; these patients made 678 attendances. Spectacles were prescribed for 139 of these patients. 30 operations were performed.

The following specimens were sent to the Municipal Laboratory during the year:—

Bacteriological specimens	6690
Biochemical specimens	850
Pathological specimens	1310

MENTAL DEFICIENCY

There were no new developments in connection with the administrative arrangements during the year.

The total number of cases under the care of the Mental Deficiency Acts Committee at the end of the year was 564. Of these 94 were in Institutions placed by the Mental Deficiency Acts Committee, 10 were in Institutions placed by parents, etc., 6 were in State Institutions placed by the Board of Control; 27 cases under home supervision were awaiting Institutional treatment; 14 cases were under domiciliary treatment by the Public Assistance Committee; 408 cases (including 307 ex-special school cases) were under home supervision; 5 cases were under official guardianship.

WELFARE OF THE BLIND

No changes were made in the administrative arrangements during the year.

The total number of blind persons on the Register at the end of the year was 318—168 males and 150 females.

At the outbreak of war 39 blind persons were evacuated from the Borough. These were accompanied by one of the home teachers, and three sighted helpers. At the end of the year the number of evacuees had been reduced to 16.

HOUSING AND ENVIRONMENTAL HYGIENE

This branch of the work of the department has suffered during the year owing to the employment of Inspectors on Civil Defence work. One district Inspector was engaged full time during the whole of the year, and three other Inspectors were engaged full time from the outbreak of war to the end of the year.

Prior to the outbreak of hostilities, in addition to their ordinary duties, the services of all Inspectors were utilised for the purpose of the selection and suitability or otherwise of sites for the erection of Anderson steel shelters. 13,389 visits to premises were made for this purpose.

During the year, 358 new houses were erected in the Borough—63 by the local authority and 295 by other bodies or persons. No houses were erected during the year which did not comply with the building bye-laws.

The total number of dwelling houses inspected for housing defects under the Public Health or Housing Acts during the year was 6,075. 28,039 inspections were made for this purpose. 334 dwelling houses were found not to be in all respects reasonably fit for human habitation.

44 new cases of overcrowding were reported. 236 cases of overcrowding involving 1,290 persons were relieved during the year.

The total number of dwellings overcrowded at the end of the year was 507, involving 508 families and 3,142 persons dwelling therein.

MATERNITY AND CHILD WELFARE

There were no important developments in this service during the year.

85 midwives (only 1 of whom was untrained) gave notice of their intention to practise in the Borough.

6 midwives surrendered their certificates under the terms of the Midwives Act, 1936.

The following is a summary of the work of the salaried midwives on the staff of the department:—

Number of bookings	980
Number of births	793
Number of visits to patients	18562

Under the terms of the agreement with the Maternity Hospital for domiciliary midwifery, the Hospital midwife carried out work as follows:—

Number of bookings	67
Number of births	63
Number of visits to patients	1231

In connection with the Maternity and Child Welfare Scheme, visits were paid by the Health Nurses as follows:—

To children under 5 years	16324
To expectant mothers	200
To mothers and children (miscellaneous matters)	3806

At the infant welfare clinics 1,375 first visits and 26,486 revisits were made by children under 5 years of age. Of these 1,285 (who made 11,085 revisits) were examined by an assistant medical officer.

Supplies of free milk were given to:—

197 nursing mothers
943 infants
41 toddlers
321 expectant mothers.

At the toddlers' clinics 316 first visits and 2,626 revisits were made.

In regard to the antenatal clinics, sessions were held on 155 occasions, the number of patients dealt with 1,156; the total number of attendances being 5,110.

A small amount of postnatal work was carried out at the antenatal clinics. 51 mothers paid 167 visits.

At the end of the year the names of 24 children were entered on the Register in accordance with the provisions of Section 65 of the Children and Young Persons Act, 1932.

Of 10 cases of Ophthalmic Neonatorum notified during the year, 5 were treated at home, the other cases being dealt with in Hospital. Vision was unimpaired in all cases.

The Registrar-General's annual statement of causes of death includes 6 deaths connected with pregnancy and childbirth.

This gives a maternal mortality rate of 2.50 per 1,000 births (living and still), as compared with a rate of 2.82 for the whole country.

The causes of the deaths were as follows:—

Puerperal sepsis	2
Other puerperal conditions	4

Upon the outbreak of war, 92 expectant mothers were evacuated from the Borough in September and a further 10 in October and 3 in November, a total of 105. It is known, however, that a number of these returned home before the end of the year.

The number of expectant mothers who were confined by the end of the year in the reception areas was 40.

CIVIL DEFENCE MEDICAL SERVICE

This service has made great calls on all sections of the Public Health staff, and no attempt can be made here to give any adequate account of the work involved.

The Government's Scheme for the Emergency Hospitals Service, staffing and equipping of First Aid Posts, etc., caused a large amount of the routine work of the department to be shelved. The demands became so great after the commencement of hostilities that the Council decided to appoint (in addition to members of the staff already seconded to the work) a whole-time Medical Officer and a whole-time Administrative Officer, and they took up duty in October.

At the end of the year there were 7 first aid posts and 9 first aid party depots (with 22 ambulances attached thereto) established at existing premises in the area.

The building of an ad hoc first aid post, and the provision of a mobile first aid unit to serve the scattered portions of the area, were decided upon, and it is hoped that they will be available during the early part of the coming year.

In addition to the personnel (whole-time and part-time) centred on first aid posts, a Medical Officer and a fully-trained Nurse are allocated to each post.

HEALTH OF SCHOOL CHILDREN

No developments of the school medical service during 1939 have to be recorded, and comparisons of the physical condition of school children in that year as compared with 1938 reveal little of any significance.

EVACUATION AND THE SCHOOL MEDICAL SERVICE

The war caused a dislocation in the service from which it had not recovered by the end of the year. Two problems had to be dealt with: (a) the continuance of medical inspection and treatment in Birkenhead when all schools were closed; and (b) the provision of medical, dental and nursing assistance to the School Medical Officers of the areas to which 9,337 Birkenhead children had been evacuated.

School Medical Inspection and Treatment.—Every attempt was made to examine all non-evacuated children of the "entrants" group (the group which is inspected during the first term of the school year). Lists of these children had been received from head teachers in August; and since it was impossible at that time to ascertain those who had been evacuated, invitations were sent to the parents of all of them to bring them for examination to the school clinics. So far as can be estimated, 50% of non-evacuated children attended in response to the invitation: a not unsatisfactory proportion in view of the uncertainty and anxiety prevailing in the early weeks of the war. It was not possible to attempt to inspect children of the 14+ group until the re-opening of schools for senior children on a tutorial basis in November. Lists of children aged 14 and over were then obtained from the head teachers; but since attendance at school was not compulsory these lists by no means comprised all the non-evacuated children of those ages. Arrangements for inspection similar to those for "entrants" were made, about 100 children being examined.

No special nutrition surveys or cleanliness examinations were carried out: such schools as were opened before the end of the year worked on a very limited shift system, which precluded systematic visitation by doctors and nurses. At all medical examinations, however, particular attention was paid to the nutritional state of the children; and it is satisfactory to be able to record that no deterioration in this respect was noted.

Except for the first few days of the war, when the whole staff—medical, nursing and clerical—were engaged on evacuation and other forms of civil defence, all the customary facilities for treatment were available. Press advertisements, and leaflets widely distributed, were used to make this known to parents; and head teachers were informed by letter. The use made of the clinics increased towards the end of the year, not only by children who had been medically inspected, but by those whose parents brought them on their own initiative.

Dental Inspection and Treatment.—Dental inspection of "entrants" was conducted at the same time as medical inspection, and any necessary treatment offered. Appointments for treatment were also made for those children in need of it whose names were on the books of the Dental Clinic. Here, again, the response may be considered to have been satisfactory.

Medical Inspection of Evacuees.—While it was obviously impossible, in view of the shortness of the notice and the numbers involved, to submit children in the first evacuation to medical inspection, this was carried out in connection with two succeeding groups. Time allowed of minor defects being cleared up and unclean conditions remedied; a small proportion of children only being prohibited from entraining.

Very few reports suggesting an unsatisfactory condition of children evacuated from Birkenhead have been received, and most of these were found to be devoid of substance.

With regard to the medical and dental care of children after evacuation, the Board of Education made it clear long before the outbreak of war that the responsibility for this rested entirely on the local authorities in the reception areas (Circular 1469 of 19th May, 1939).

Close contact was, however, formed and maintained with the School Medical Officers of these areas in regard to their capability to cope with the provision of health services for their greatly enlarged school populations. Merionethshire and Montgomeryshire both asked for extra medical assistance. This was met by the despatch (for four days weekly) of Dr. A. M. Williams to the former county to carry out school medical inspections, arrangements being made for her transfer to Montgomeryshire as soon as this work was completed. Dental assistance was required in this county and Flintshire. Mr. Marshall Smith and Mr. A. C. Capper were accordingly sent, the former being accompanied by a health nurse. By arrangement with Liverpool, children in Flintshire evacuated from that city were dealt with by Mr. Capper in return for Birkenhead children being medically inspected by a member of the Liverpool staff. In Shropshire and Caernarvonshire the School Medical Officers had engaged extra medical staff; making arrangements with local District Nursing Associations for the provision of nursing assistance. In the more remote parts of their areas (and in Merionethshire) they have utilised the services of private dentists for urgent dental treatment.

In view of the great difficulties which the receiving authorities have had to face, especially in the very sparsely populated counties, in providing medical and dental services for a large influx of children, the parents of these children have good reason to be grateful for what has been done to ensure that the facilities to which they have been accustomed in Birkenhead have been so fully provided in the reception areas.

Provision of free nourishment.—Immediately before the war the number of children receiving free nourishment was 2,031 (free milk, 829; free meals, 936; free milk and meals, 266). The closing of the schools caused the supply of free milk to be stopped.

Free meals continued to be provided at three centres, but the number of recipients fell to 280. The evacuation of a large number of children was mainly responsible for the decline. In the absence of the usual nutritional surveys, investigations were made by the school attendance staff into cases of alleged under-nourishment. Where the family circumstances came within the scope of the committee's income scale free meals were at once provided. The number of recipients slowly rose; but the improvement in local industrial conditions has tended to keep the total figure low.

ELEMENTARY SCHOOLS

Number of elementary schools and school children, as at 31st July, 1939:—

Council Schools	22		
Voluntary Schools	20	Total	42
The recognised accommodation of these schools was :			
Council Schools	16,753		
Voluntary Schools	10,901	Total	27,654
The average number of scholars on the rolls was :			
Council Schools	12,200		
Voluntary Schools	7,552	Total	19,752
The average attendance was :			
Council Schools	11,620		
Voluntary Schools	6,685	Total	17,705

MEDICAL INSPECTION

(see note a)

A.—ROUTINE MEDICAL INSPECTIONS

Number of Inspections in the Prescribed Groups (see note b)—

*Entrants	855
Second age group	2075
Third age group	1679
Total	4609

Number of other Routine Inspections (see note c)

Fourth age group	1423
Grand Total	6032

B.—OTHER INSPECTIONS

Number of Special Inspections (see note d).....	3597
In schools	48
In clinics	3549
Number of Re-inspections (see note e)	3608
In schools	1203
In clinics	2405
Total	7205

*Examined between October and December on clinic premises.

CHILDREN FOUND TO REQUIRE TREATMENT

Number of individual children found at Routine Medical Inspection to Require Treatment (excluding Defects of Nutrition, Uncleanliness and Dental Diseases).

Note.—No individual child is counted more than once in any column of this Table; for example, a child suffering from defective vision and from adenoids appears once in Column 2, once in Column

3 and once only in Column 4. Similarly a child suffering from two defects other than defective vision appears once only in Column 3 and once in Column 4.

Group. (1)	For defective vision (excluding squint). (2)	For all other conditions recorded in table on p. 5 (3)	Total. (4)
Entrants.....	—	62	62
Second Age Group.....	121	156	251
Third Age Group.....	108	89	186
Total (Prescribed Groups)	229	307	499
Other Routine Inspections	90	95	152
Grand Total.. ...	319	402	651

NOTES ON TABLES (page 22)

(a) The return refers to a complete calendar year.

(b) This heading relates solely to the routine medical inspection of the three ordinary age groups, *i.e.*, to medical inspection carried out

(i) in compliance with Article 17 of the Consolidated Regulations relating to Special Services—Grant Regulations No. 19;

(ii) on the school premises (or at a place specially sanctioned by the Board);

(iii) for the purpose of making a report on each child on the lines of the approved Schedule set out in Circular 582.

(c) Under this heading is recorded *routine* inspections, if any, of children who do not fall under the three prescribed age-groups, *e.g.*, *routine* inspections of a fourth age-group or of other groups of children, as distinct from those who are individually selected on account of some suspected ill-health for "Special" Inspection.

(d) A Special Inspection is a medical inspection by the School Medical Officer himself or by one of the Medical Officers on his staff of a child specially selected or referred for such inspection, *i.e.*, not inspected at a routine medical inspection as defined above. Such children may be selected by the Medical Officer during a visit to the School or may be referred to him by the Teachers, School Nurses, Attendance Officers, Parents, or otherwise. It is immaterial for the purpose of this heading whether the children are inspected at the School or at the Inspection Clinic or elsewhere. If a child happens to come before the School Medical Officer for special inspection during a year in which it falls into one of the routine groups, its routine inspection is entered in Part A of the table on page 6 headed "Medical Inspection" and its special inspection in Part B. The inspection recorded under the heading of special inspections is only the first inspection of the child so referred for a particular defect. If a child who has been specially inspected for one defect is subsequently specially inspected for another defect, such subsequent inspection is recorded as a Special Inspection and not as a Re-inspection.

(e) Under this heading is entered the medical inspections of children who as the result of a routine or special inspection come up later on for subsequent re-inspection, whether at the School or at the Inspection Clinic. The first inspection in every case is entered as a routine or special inspection as the case may be. Every subsequent inspection of the same defect is entered as a re-inspection.

Nothing is included under the head of special inspections or re-inspections except such inspections as are defined above. Attendances for treatment by a Nurse, or for examinations by anyone other than a Doctor on the staff of the School Medical Service, are not recorded as medical inspections. If, however, at any such attendance a child is also examined by one of

the Authority's Medical Officers, this is recorded as a special inspection or re-inspection as the case may be, even if treatment is also given; but such attendance is also of course recorded as an attendance for treatment.

RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION

Defect or disease (1)	Routine Inspections		Special Inspections	
	No. of defects		No. of defects	
	Requiring treatment (2)	Requiring to be kept under observation, but not requiring treatment (3)	Requiring treatment (4)	Requiring to be kept under observation but not requiring treatment (5)
<i>Skin</i>				
(1) Ringworm—Scalp.....	1	—	8	—
(2) „ —Body	1	1	9	—
(3) Scabies	20	—	144	—
(4) Impetigo	2	—	57	—
(5) Other diseases (non-tuberculous).....	7	4	115	—
<i>Eye</i>				
(6) Blepharitis	17	11	58	—
(7) Conjunctivitis	4	1	57	—
(8) Keratitis	1	—	—	—
(9) Corneal opacities	2	—	7	—
(10) Other conditions (excluding defective vision and squint) ...	1	3	56	—
(11) Defective vision (excluding squint)...	319	249	42	—
(12) Squint	28	14	10	1
<i>Ear</i>				
(13) Defective hearing	12	3	29	—
(14) Otitis media	12	8	96	—
(15) Other ear diseases	7	8	47	—
<i>Nose and throat.</i>				
(16) Chronic tonsillitis only	34	198	180	—
(17) Adenoids only	5	10	2	—
(18) Chronic tonsillitis and adenoids	5	7	2	—
(19) Other conditions	15	24	111	—
(20) Enlarged cervical glands (non-tuberculous).....	8	77	46	—
(21) Defective speech	3	9	12	—
<i>Heart and circulation</i>				
(22) Heart disease—Organic	—	—	—	—
(23) „ —Functional	20	91	27	—
(24) Anæmia	46	22	50	—
<i>Lungs</i>				
(25) Bronchitis	5	20	16	—
(26) Other non-tuberculous diseases ..	4	25	100	—
<i>Tuberculosis</i>				
(27) Pulmonary—Definite	—	—	—	—
(28) „ Suspected	—	1	1	—
(29) Non-pulmonary—Glands	2	1	4	—
(30) „ Bones and joints.....	—	—	1	—
(31) „ Skin	—	—	—	—
(32) „ Other forms.....	1	—	1	—
<i>Nervous system</i>				
(33) Epilepsy	—	—	2	—
(34) Chorea.....	3	3	5	—
(35) Other conditions ..	—	1	3	—
<i>Deformities</i>				
(36) Rickets ..	—	4	—	—
(37) Spinal curvature	5	18	1	—
(38) Other forms	38	41	19	—
(39) Other defects and diseases (excluding Defects of Nutrition, Uncleanliness and Dental Diseases)	73	43	2172	3
TOTAL.....	701	897	3490	4

CLASSIFICATION OF THE NUTRITION OF CHILDREN INSPECTED DURING THE YEAR IN THE ROUTINE AGE GROUPS

(see Administrative Memorandum No. 124, dated 31st December, 1934)

Age Groups	Number of Children Inspected	A (Excellent)		B (Normal)		C (Slightly subnormal)		D (Bad)	
		No.	%	No.	%	No.	%	No.	%
*Entrants	855	69	8.07	720	84.21	66	7.72	—	—
Second Age Group ...	2075	187	9.01	1738	83.76	147	7.08	3	0.15
Third Age Group	1679	208	12.39	1337	79.63	131	7.80	3	0.18
Other Routine Inspections	1331	187	14.05	1007	75.66	136	10.22	1	0.08
Total,.....	5940	651	10.96	4802	80.84	480	8.08	7	0.12

* Examined since 31st August, 1939, on clinic premises.

RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA

The returns are in respect of all exceptional children in the area, and are not confined only to those for whom suitable accommodation is available.

For the purpose of this Table no child is included who has not been examined by the School Medical Officer, by a medical member of the Authority's staff, or by the Tuberculosis Officer.

The table is made up from the list of exceptional children as it stood on the last day of the calendar year.

Children sent by the Authority to day or residential schools outside the area are included in this table; children who are living in residential schools in the area, or attend day schools in the area, but who come from other areas, are not included.

No child is entered under more than one heading in this form

BLIND CHILDREN

A blind child is defined by Section 69 of the Education Act, 1921, as one who is "too blind to be able to read the ordinary school books used by children." This definition covers some children who are totally, or almost totally, blind and can only be appropriately taught in a school for blind children, and others who have partial sight and can be appropriately taught in a school for partially sighted children. Only the first class is included in this section.

Number at Certified Schools for the Blind 6

PARTIALLY SIGHTED CHILDREN

In this section are included only children who, though they cannot read ordinary school books or cannot read them without injury to their eyesight, have such power of vision that they can appropriately be taught in a school for the partially sighted.

Children who are able by means of suitable glasses to read the ordinary school books used by children without fatigue or injury to their vision are not included in this table.

Number on register 36

During the year 4 new cases were added to the register.

Below is a classification of the defects from which these partially sighted children suffer :

Myopia	5
Myopic astigmatism	14
Corneal nebulae	2
Corneal nebulae and myopic astigmatism	1
Nystagmus	2
Hypermetropic astigmatism and nystagmus	2
Congenital cataract	3
Coloboma iris and choroid	3
Optic atrophy	2
Congenital aniridia	1
Congenital buphthalmos	1
	<hr/>
	36
	<hr/>

DEAF CHILDREN

A deaf child is defined by Section 69 of the Education Act, 1921, as one who is "too deaf to be taught in a class of hearing children in an elementary school." This definition covers some children who are totally, or almost totally, deaf and can only be appropriately taught in a school for deaf children, and others who have partial hearing and can be appropriately taught in a school for partially deaf children. Only the first class is included in this section.

Number at Certified Schools for the Deaf	14
Number at no school or institution	6
	<hr/>
	20
	<hr/>

PARTIALLY DEAF CHILDREN

In this section are included children who can appropriately be taught only in a school for the partially deaf.

Number on register	19
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MENTALLY DEFECTIVE CHILDREN

Mentally defective children are children who, not being imbecile and not being merely dull or backward, are incapable by reason of mental defect of receiving proper benefit from the instruction in the ordinary public elementary schools but are not incapable by reason of that defect of receiving benefit from instruction in special schools for mentally defective children.

The following table includes all such children except those who have been notified to the Local Authority under the Mental Deficiency Act in accordance with Article 3 of the Mental Deficiency (Notification of Children) Regulations, 1928. Particulars relating to these children are entered in the return of notified children (see following page).

Number on register	112
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Claughton Road Council School.—In accordance with the arrangements for ascertainment, examinations of children suspected to be mentally defective were held at various schools and clinics during the year by the Assistant Medical Officers.

The results of these examinations are set out below:

Total number examined—Boys	14	
Girls	9	
	—	23
Number certified as mentally defective—Boys	9	
Girls	7	
	—	16*

* Three of these were notified to the local Authority under the Mental Deficiency Acts, and one was recommended for residential special school

Number recommended to continue in attendance at ordinary elementary schools—Boys	5	
Girls	2	
	—	7

12 children left the school during the year

(a) on reaching the age of 16 years	5*
(b) before reaching the age of 16 years	7†

* One notified to the Local Authority under the Mental Deficiency Acts.

† Three were granted leave of absence.

One was sent to an approved school.

Two left the district.

One was excluded on medical grounds.

Mental Deficiency (Notification of Children) Regulations, 1928.—

Statement of the number of children notified during the year ended 31st December, 1938, by the Local Education Authority to the Local Mental Deficiency Authority.

Total number of children notified 4

Analysis of the above total

Diagnosis	Boys	Girls
1. (i) Children incapable of receiving <i>benefit</i> or <i>further</i> benefit from instruction in a Special School :		
(a) Idiots	—	—
(b) Imbeciles	1	2
(c) Others	—	—
(ii) Children unable to be instructed in a Special School without detriment to the interests of other children :		
(a) Moral defectives.....	—	—
(b) Others	—	—
2. Feeble-minded children notified on leaving a Special School on or before attaining the age of 16	1	—
3. Feeble-minded children notified under Article 3, <i>i.e.</i> "special circumstances" cases	—	—
4. Children who in addition to being mentally defective were blind or deaf	—	—
Total.....	2	2

EPILEPTIC CHILDREN

In this part of the table only those children are included who are epileptic within the meaning of the Act, i.e., children who, not being idiots or imbeciles, are unfit by reason of severe epilepsy to attend the ordinary public elementary schools.

(For practical purposes the Board are of opinion that children who are subject to attacks of major epilepsy in school should be recorded as "severe" cases and excluded from ordinary public elementary schools.)

Number on register 4

PHYSICALLY DEFECTIVE CHILDREN

A.—TUBERCULOUS CHILDREN

Only children diagnosed as tuberculous and requiring treatment for tuberculosis at a sanatorium, a dispensary, or elsewhere are recorded in this category. Children suffering from crippling due to tuberculosis which is regarded as being no longer in need of treatment are recorded as crippled children, provided that the degree of crippling conforms to the description of a crippled child given at the head of Section C below. All other tuberculous children who are regarded as being no longer in need of treatment are recorded as delicate children provided the Medical Officer is prepared to certify under Section 55 of the Education Act, 1921, that they are incapable by reason of physical defect of receiving proper benefit from the instruction in the ordinary Public Elementary Schools.

I.—CHILDREN SUFFERING FROM PULMONARY TUBERCULOSIS

(Including pleura and intra-thoracic glands)

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
4	14	5	3	26

II.—CHILDREN SUFFERING FROM NON-PULMONARY TUBERCULOSIS

(This category includes tuberculosis of all sites other than those shown in (I) above)

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
14	220	2	2	238

B.—DELICATE CHILDREN

This section is confined to children (except those included in other groups) whose general health renders it desirable that they should be specially selected for admission to an Open Air School. Such children are included irrespective of the actual provision of Open Air Schools in the area, or of the practicability in present circumstances of sending the children to Residential Schools. Children are not regarded as suitable for admission to an Open Air School unless the Medical Officer is prepared to certify under Section 55 of the Education

Act, 1921, that they are incapable by reason of physical defect of receiving proper benefit from the instruction in the ordinary Public Elementary Schools.

Number on register 9

C.—CRIPPLED CHILDREN

This section is confined to children (other than those diagnosed as suffering from tuberculosis and in need of treatment for that disease) who are suffering from a degree of crippling sufficiently severe to interfere materially with a child's normal mode of life, i.e., children who generally speaking are unable to take part, in any complete sense, in physical exercises or games or such activities of the school curriculum as gardening or forms of handwork usually engaged in by other children, and in whose case the Medical Officer is prepared to certify under Section 55 of the Education Act, 1921, that they are incapable by reason of such physical defect of receiving proper benefit from the instruction in the ordinary Public Elementary Schools.

Number on register 19

D.—CHILDREN WITH HEART DISEASE

This section is confined to children in whose case the Medical Officer is prepared to certify, under Section 55 of the Education Act, 1921, that they are incapable by reason of such physical defect of receiving proper benefit from the instruction in the ordinary Public Elementary Schools.

Number on register 26

Special Educational Classes.—A total of 16 children, including a number whose heart condition was too severe to permit of their attendance at an ordinary elementary school, attended these classes, which are organised by the Invalid Children's Association.

CHILDREN SUFFERING FROM MULTIPLE DEFECTS

Mental Defect (Feeble-minded and Crippled)	2
Mental Defect (Feeble-minded and Severe Epilepsy)	1
Mental Defect (Feeble-minded and Heart Disease)	1

RETURN OF DEFECTS TREATED DURING THE YEAR

(see note a)

GROUP I.—MINOR AILMENTS (excluding Uncleanliness, for which see page 38).

Disease or defect (1)	Number of defects treated, or under treatment during the year.		
	Under the Authority's scheme (see note b) (2)	Otherwise (3)	Total (4)
<i>Skin</i> —Ringworm—scalp—			
(i.) X-Ray treatment	—	—	—
(ii.) Other treatment	7	—	7
Ringworm—body	9	2	11
Scabies	80	—	80
Impetigo	54	—	54
Other skin disease	93	4	97
<i>Minor eye defects</i>	152	6	158
(external and other, but excluding cases falling in Group II.)			
<i>Minor ear defects</i>	135	3	138
<i>Miscellaneous</i>	1551	11	1562
(e.g., minor injuries, bruises, sores, chilblains, &c.)			
Total ..	2081	26	3107

The number of children who received treatment at the General School Clinic was 2,055; the total attendances numbered 9,399.

During the past year the Health Nurses paid 710 visits to the homes of children with defects in connection with “ following up ”—654 first visits, 56 re-visits.

Of the children examined at routine and special inspections in ordinary schools during the year who were found to be suffering from defects requiring medical or dental attention, 378 received treatment before the end of the year.

GROUP II.—DEFECTIVE VISION AND SQUINT (excluding Minor Eye

Defects treated as Minor Ailments—Group I.)

Defect or disease (1)	Number of defects dealt with		
	Under the Authority's scheme (see note <i>b</i>) (2)	Otherwise (3)	Total (4)
Errors of refraction (including squint)	502	17	519
Other defect or disease of the eyes (excluding those recorded in Group I)	12	—	12
Total.....	514	17	531

	Under the Authority's Scheme	Otherwise	Total
No. of children for whom spectacles were			
(a) Prescribed	443	17	460
(b) Obtained	372	17	389

Dr. Williams continued in charge of the Eye Clinic.

Care is taken to secure that, so far as can be judged without any elaborate system of investigation, only those parents who are not in a position to obtain private attention to their children's eyes are allowed to avail themselves of the facilities provided at the clinic.

During the year 320 new cases were examined. Spectacles were prescribed for 173 of these, the remainder being found to be emmetropic or cases for whom spectacles were of no benefit. 476 children attended for re-examination, and 372 pairs of spectacles (new or replaced) were supplied. The total cost of all the spectacles which were ordered during the year (including those ordered for secondary school children) was £98 9s. 3d., of which the parents were required to pay £85 13s. 11d. The total sum collected during the year (including arrears from previous years) was £84 10s. 0d.

17 new cases were examined and 62 re-examinations were carried out by Dr. Charters, the consultant ophthalmic surgeon, at the Birkenhead Municipal Hospital.

The following conditions were recorded among the new cases who attended the clinic :

Corneal nebulae	4
Nystagmus	2
Corneal ulcers	6

The new cases of strabismus noted during the year were as follows :

Convergent : Right eye 16; left eye 18; alternating 1.
Divergent : Right eye 1.

GROUP III.—TREATMENT OF DEFECTS OF NOSE AND THROAT

Number of defects													
Received operative treatment												Received other forms of treatment (4)	Total number treated (5)
Under the Authority's scheme in clinic or hospital, (see note <i>b</i> , (1))				By private practitioner or hospital, apart from the Authority's scheme (2)				Total (3)					
(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)		
7	—	9	—	4	—	3	—	11	—	12	—	103	136

(i) Tonsils only. (ii) Adenoids only. (iii) Tonsils and adenoids.
(iv) Other defects of the nose and throat.

A total of 180 children referred to Mr. Leathart, the consultant aurist and laryngologist, was examined by him. 78 children, after re-examination, were found to be improved or cured. This total includes those children who received operative treatment during the year.

GROUP IV.—ORTHOPÆDIC AND POSTURAL DEFECTS (see note c)

	Under the Authority's Scheme (see note b) (1)			Otherwise (2)			Total number treated (see note d)
	Residential treatment with education	Residential treatment without education	Non-residential treatment at an orthopædic clinic (iii)	Residential treatment with education	Residential treatment without education	Non-residential treatment at an orthopædic clinic (iii)	
	(i)	(ii)	(iii)	(i)	(ii)	(iii)	
Number of children treated	2	10	322	—	—	—	334

1. *Examinations carried out at the clinic by the orthopædic surgeon.* —At the Clinic Dr. Hartley Martin, the orthopædic surgeon, attended on 34 occasions during the year. The after-care sister made 41 attendances.

187 new cases were dealt with, as compared with 296 in the previous year.

Tuberculous cases	4
Non-tuberculous cases—	
Under school age	85
Of school age	98
	<hr/> 187

There were 834 re-examinations made, as compared with 836 in 1938:—

Tuberculous cases	49
Non-tuberculous cases—	
Under school age	233
Of school age	540
Over school age	12
	<hr/> 834

The average number of cases seen by the surgeon per session was 30.

In the following table Dr. Hartley Martin sets out a classification of cases dealt with and shows the results of treatment :

Diagnosis	Remaining at end of 1938	1939 New cases			Remaining at end of 1939			Discharges 1939					Died
		School age			School age			Cured	Relieved	Left district	Refused treatment	Unsuitable	
		Under	Of	Over	Under	Of	Over						
Infantile Paralysis	33	...	1	...	2	20	...	...	1	3	3	...	...
Spastic Paralysis	22	1	6	...	1	24	...	...	1	1	...	...	1
Rickets	49	12	1	...	20	20	...	18	...	2	2	...	...
Osteitis and Arthritis :													
(a) Tuberculous	20	1	3	...	2	20	2	...	...	...	...	...	...
(b) Non-Tuberculous ..	4	1	4	...	1	5	...	3	...	...	...	...	...
Congenital Deform.	40	8	4	...	14	27	1	3	...	3	3	...	...
Acquired Deform.....	211	42	38	...	62	136	...	76	...	3	12	1	...
No Apparent Defects..	22	21	44	...	13	5	...	...	...	1	...	68	...
Totals... ..	401	86	101	...	115	257	3	100	2	13	20	69	1

2. *Massage and remedial exercises.*—Massage and remedial exercises as prescribed by Dr. Martin were provided by the Invalid Children's Association. (There are two whole-time masseuses on the Association's staff.)

Attendance for massage and remedial exercises were made by clinic cases as follows :

Tuberculous cases	31
Non-tuberculous cases—	
Under school age	463
Of school age	2946
Over school age	84
	<hr/>
	3524

In addition to the above, 625 attendances were made by non-clinic cases (that is to say, cases sent to the Association by orthopædic surgeons attached to voluntary hospitals, etc.) as follows:—

Under school age	1
Of school age	624
Over school age	—

3. *Surgical apparatus—splints, etc.*—These are provided by the Association, the number of cases dealt with during the past year being as follows :

	Under School Age	Of School Age	Over School Age
Tuberculous cases—			
Clinic cases	—	5	—
Non-clinic cases	1	1	—
Non-tuberculous cases—			
Clinic cases	41	130	29
Non-clinic cases	21	78	10

4. *Milk, tonics, convalescence, after-care.*—Most useful work is also done by the Association in providing milk, tonics, etc., for patients for whom these have been prescribed by the orthopædic surgeon and other doctors, and in following up and helping patients who have passed through the stage of active treatment :

	Under School Age	Of School Age	Over School Age
Children supplied with milk—			
Tuberculous cases—			
Clinic cases	—	15	—
Non-clinic cases	—	4	—
Non-tuberculous cases—			
Clinic cases	293	79	—
Non-clinic cases	139	103	2
Children supplied with tonics—			
Tuberculous cases—			
Clinic cases	—	14	—
Non-clinic cases	—	—	—
Non-tuberculous cases—			
Clinic cases	209	70	—
Non-clinic cases	35	15	1
Children sent to Convalescent Homes and Country Hospitals—			
Tuberculous cases—			
Clinic cases	—	1	—
Non-clinic cases	—	—	—
Non-tuberculous cases—			
Clinic cases	42	112	—
Non-clinic cases	5	33	1

5. *Hospital Treatment.*—Of the 588 cases that have been on the register of the orthopædic clinic and regarded as suitable for

treatment during the past year, 27 (or 4.6%) required hospital treatment and were admitted to the Birkenhead Municipal Hospital and the Children's Hospital, Leasowe. Of this number, 4, or 15%, were children under school age. The cases comprise :

	Stay in Hospital	
	Cases	Days
Rickets, Bow-legs, Knock-knee	2	198
Congenital deformities	5	627
Acquired deformities	6	310
Infantile paralysis	2	142
Spastic paralysis	7	550
Non-Tb. arthritis	5	546

The total number of days in hospital was 2,373. Of this number, 91% was in respect of children of school age, equivalent to 6.5 beds occupied throughout the year.

6. *Birkenhead Orthopaedic Hospital.*—At this institution children suffering from orthopaedic defects of tuberculous origin are treated. Many are cases who have passed through a course of treatment at Leasowe Hospital, or are awaiting admission to that institution.

7. *Treatment by Ultra-Violet Rays.*—Treatment of rickets and other deforming conditions is provided. Fuller details of the work carried out at the Clinics and by the Invalid Children's Association are given below.

GROUP V.—TREATMENT BY ULTRA-VIOLET RAYS.

At the North Health Clinic a total of 74 children of school age made 869 attendances during the year :

	Improved	Not Improved	Still under treatment at end of year
Debility	25	5	7
Tuberculosis	5	4	4
Anaemia	7	3	3
Eczema	1	—	—
Asthma	3	1	2
Bronchitis	2	—	2
Other conditions	10	8	14
	53	21	32

At the South Health Clinic a total of 84 children of school age made 1,494 attendances during the year :

	Improved	Not Improved	Still under treatment at end of year
Debility	15	3	9
Tuberculosis	3	—	2
Bronchitis	8	4	7
Anaemia	3	—	2
Urticaria	1	—	—
Other conditions	28	19	15
	58	26	35

At the Invalid Children's Association premises, 44 children of school age made 536 attendances during the year :

	Improved	Not Improved	Still under treatment at end of year
Debility	34	5	17
Tuberculosis	3	2	2
	37	7	19

In addition, 728 attendances were made by children below and above school age.

DENTAL INSPECTION AND TREATMENT

(1) Number of children who were:—

(i) Inspected by the Dentist:

Routine age groups—

aged 4	22
aged 5	838
aged 6	775
aged 7	783
aged 8	1023
aged 9	1207
aged 10	1141
aged 11	1266
aged 12	1388
aged 13	1222
aged 14	178

9843

(b) Specials (see note e) —

(c) TOTAL (Routine and Specials) 9843

(2) Number found to require treatment 6487

(3) Number actually treated 6662

(4) Attendances made by children for treatment 8312

(5) Half-days devoted to:—

Inspection	136
Treatment	1377

Total 1513

(6) Fillings (see note f):—

Permanent Teeth 5183

Temporary Teeth 103

Total 5286

(7) Extractions:—

Permanent Teeth 2522

Temporary Teeth 6073

(8) Administrations of general anaesthetic for extractions..... 2264

(9) Other Operations:—

Permanent Teeth 1763

Temporary Teeth 91

Total 1854

Cleanliness of teeth.—The children examined were classified according to cleanliness of teeth as follows:

Clean 5524

Fairly clean 3460

Dirty 859

9843

Condition of gums.—The following figures show the condition of the gums of the children examined:

Gums healthy 8139

Gums inflamed 826

Gums septic 878

9843

Condition of bite.—This was found to be as set out below:

Bite good 6260

Bite fair 3058

Bite bad 525

9843

Notices were sent to the parents of the 6,487 children found to require dental treatment, with the following results:—

Refused to have treatment done or did not reply ...	454
Stated that treatment would be obtained privately ...	900
Requested treatment at the Dental Clinic	5133
	<hr/>
	6487

Of the 5,133 children for whom treatment at the clinic was requested :

3601	were treated before the end of the year
1405	did not attend when sent for
127	were awaiting treatment at the end of the year
<hr/>	
5133	

The total number of children treated at the clinic during 1939 was:

Following on 1938 inspections	682
Following on 1939 inspections	3601
Brought by parents on their own initiative	1432
From Claughton Road C. School	4
	<hr/>
	5719

6,195 treatments were completed during the year.

2,181 parents paid 1s. each and 104 parents 6d. each for treatment for their children, the total amount paid being £111 13s. 0d. 4,626 children were treated free of charge.

UNCLEANLINESS AND VERMINOUS CONDITIONS

- | | |
|--|-------|
| (i) Average number of visits per school made during the year by the Health Nurses | 9 |
| (ii) Total number of examinations of children in the Schools by Health Nurses | 39736 |
| (iii) Number of <i>individual</i> children found unclean (<i>see note g</i>) | 2959 |
| (iv) Number of <i>individual</i> children cleansed under Section 87 (2) and (3) of the Education Act, 1921 | 7 |
| (v) Number of cases in which legal proceedings were taken:— | |
| (a) Under the Education Act, 1921 | — |
| (b) Under the School Attendance Byelaws | — |

In 5 cases of persistent neglect notices were served on the parents and in each case the child was satisfactorily cleansed at home.

The Health Nurses paid 24 visits to the homes of children in regard to uncleanliness and verminous conditions (20 first visits, 4 re-visits).

NOTES ON TABLES (pages 29-39)

(a) The Table deals with all defects treated during the year, however they were brought to the Authority's notice, i.e., whether by routine inspection, special inspection, or otherwise, during the year in question or previously.

(b) This heading includes all cases that received treatment under definite arrangements or agreements for treatment made by the Local Education Authority and sanctioned by the Board of Education under Section 80 of the Education Act, 1921. Cases which, after being recommended for treatment or advised to obtain it, actually received treatment by private practitioners, or by means of direct application to hospitals, or by the use of hospital tickets supplied by private persons, etc., are entered under other headings.

(c) Postural defects which received non-residential treatment otherwise than at an **orthopædic** clinic are not recorded in this Table.

(d) A child may be recorded in more than one category and therefore the total number of children treated will not necessarily be the same as the sum of the figures in the separate categories.

(e) The heading "Specials" in this Table relates to all children inspected by the School Dentist otherwise than in the course of the routine inspection of children in one of the age groups covered by the Authority's approved scheme, namely, to children specially selected by him, or referred by Medical Officers, Parents, Teachers, etc., on account of urgency.

(f) Temporary fillings, whether in permanent or temporary teeth, are recorded as other operations.

- (g) (i) All cases of uncleanness, however slight, are recorded.
- (ii) The return relates to individual children and not to instances of uncleanness.

SECONDARY SCHOOLS

The powers and duties of local education authorities with regard to medical inspection and treatment in secondary schools and continuation schools are set out in Section 80 of the Education Act, 1921.

Schools at which medical inspection is carried out.—Medical inspection is arranged for at the following schools :

(a) Provided by the Local Education Authority—	No. on Roll
The Birkenhead Institute (Boys)	393
The Girls Secondary School	458
Rock Ferry High School (Boys)	332
Park High School (Boys)	335
(b) Not provided by the Local Education Authority—	
The Higher Tranmere High School for Girls	209
The Convent Secondary School	314

There are no continuation schools provided by the local education authority.

MEDICAL INSPECTION**A.—ROUTINE MEDICAL INSPECTIONS**

Number of Inspections 1243

B.—OTHER INSPECTIONS

Number of Special Inspections	5
In schools	—
In clinics	5
Number of Re-Inspections	234
In schools	234
In clinics	—
Total	239

The following schools were inspected, the totals and numbers found defective being shown :

	No. Inspected	No. found defective
Girls' Secondary School	466	37
Rock Ferry High School	333	21
Higher Tranmere High School for Girls	99	13
Park High School	345	7
	1243	78

* Excluding those with defective teeth and defects of nutrition.

Included in the total are 174 who were inspected as entrants to these schools.

RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION

Defect or disease (1)	Routine Inspections		Special Inspections	
	No. of Defects		No. of Defects	
	Requiring treatment	Requiring to be kept under observation, but not requiring treatment	Requiring treatment	Requiring to be kept under observation but not requiring treatment
(1)	(2)	(3)	(4)	(5)
Skin : Scabies.....	1	—	2	—
other diseases (non-tuberculous)	1	1	2	—
Eye : blepharitis	2	4	—	—
other conditions (excluding defective vision and squint)	—	2	—	—
defective vision (excluding squint)	46	85	—	—
squint	—	—	1	—
Ear : otitis media.....	1	1	1	—
other ear diseases	—	1	1	—
Nose and throat : chronic tonsillitis only... ..	2	30	1	—
adenoids only	—	—	1	—
other conditions	—	6	1	—
Enlarged cervical glands (non tuberculous)	3	23	—	—
Heart and circulation :				
Functional	2	34	—	—
Anæmia	2	10	—	—
Lungs—bronchitis	—	2	—	—
other non-tuberculous diseases.....	1	2	—	—
Deformities : spinal curvature.....	6	4	—	—
other forms	9	26	1	—
Other defects and diseases (excluding defects of nutrition, uncleanness and dental diseases) ...	6	15	3	—
Total number of defects	81	246	14	—

RETURN OF DEFECTS TREATED DURING THE YEAR

TREATMENT TABLES

GROUP I.—MINOR AILMENTS

Defect or disease.	Number of defects treated or under treatment during the year, under the Authority's scheme.
Skin : Scabies.....	2
other skin diseases	1
Minor eye defects.....	1
Minor ear defects	2
Nose and throat :	
other conditions	1
Miscellaneous (e.g. minor injuries, bruises, etc.)	1
Total	8

8 children made 38 attendances for treatment during the year.

GROUP II.—DEFECTIVE VISION AND SQUINT (excluding Minor Eye Defects)

Defect or disease	No. of defects dealt with			
	Under the Authority's scheme	By private practitioner or at hospital, apart from the Authority's scheme	Otherwise	Total
(1)	(2)	(3)	(4)	(5)
Errors of Refraction (including squint)	47	15	—	62
Total	47	15	—	62

Total number of children for whom spectacles were prescribed—

(a) Under the Authority's scheme	44
(b) Otherwise	15

Total number of children who obtained or received spectacles—

(a) Under the Authority's scheme	38
(b) Otherwise	15

58 children were submitted to refraction at the Eye Clinic.

25 new cases were examined. Spectacles were prescribed for 11 of them, the remainder being found to be emmetropic or cases for whom spectacles were of no benefit. 33 children attended for re-examination.

GROUP III.—TREATMENT OF DEFECTS OF NOSE AND THROAT

Number of children who received treatment other than by operation 2

GROUP IV.—ORTHOPÆDIC AND POSTURAL DEFECTS

	Under the Authority's Scheme non-residential treatment at a orthopædic clinic.
Number of children treated	29

DENTAL TREATMENT

(1) Treated	249
(2) Attendances made by children for treatment	354
(3) Fillings—Permanent Teeth	396
Temporary Teeth	—
(4) Extractions—Permanent Teeth	129
Temporary Teeth	21
(5) Administrations of general anaesthetics for extractions	57
(6) Other Operations—Permanent Teeth	21

MISCELLANEOUS

Children and Young Persons Act, 1933.—23 children summoned to appear before Police Courts were examined in accordance with the provisions of this Act.

Employment of Children Byelaws.—61 children were medically examined as to fitness for work under these byelaws. In 3 cases certificates were not granted.

Provision of Meals.—An average number of 633 children received meals each day, the total number of meals provided during the year being 160,839. Meals were supplied five days per week, with the exception of Bank and Public Holidays.

Past Infectious Diseases.—Enquiry was made at each routine medical inspection as to the infectious diseases from which the children might have suffered.

(1) Children aged 3—7

	No. of Cases	Percentage
No Infectious Disease	207	4.0
Measles	461	53.91
Whooping Cough	360	42.11
Scarlet Fever	50	5.85
Diphtheria	40	4.68
Chicken Pox	204	23.86
Mumps	53	6.19

(2) Children aged 8—14

	No. of Cases	Percentage
No Infectious Disease	198	23.16
Measles	4712	91.00
Whooping Cough	3141	60.67
Scarlet Fever	458	8.85
Diphtheria	421	8.13
Chicken Pox	2685	51.86
Mumps	1784	34.46

Note.—The same child may have had more than one of these diseases

Co-operation of Parents.—Parents attended at the examination of 3,600 (59.68%) of the 6,032 children dealt with at routine inspections.

Group	Parents Present
Entrants	99.88%
2nd age group.....	79.57%
3rd age group.....	42.17%
4th age group.....	27.2 %

School Camp.—The eleventh school camp for children from the schools of Birkenhead was held during the period 24th May to 23rd June.

Over six hundred children who had been selected as being suitable cases to attend were medically examined. After numerous re-examinations, and treatment for various minor ailments in a number of children

by the Health Nurses, 544 children (271 boys and 273 girls) were eventually passed as medically fit and attended the camp at Dyserth, near Prestatyn.

Two Health Nurses were in attendance at the girls' camp for the purpose of giving first-aid or carrying out any necessary treatment for minor ailments.

Vaccination.—In the ordinary inspections children were examined as to vaccination marks. Of the 6,032 children examined

2001	(33.17%)	showed no marks.
2927	(48.52%)	showed one mark.
343	(5.69%)	showed two marks.
82	(1.36%)	showed three marks.
679	(11.26%)	showed four or more marks.

Height and weight.—Below is set out the average heights and weights (measured without footwear) of children comprising the groups examined during the course of routine inspections, together with the standard deviations :

Group	Height							
	Boys				Girls			
	No.	Ft.	Ins.	S.D. Ins.	No.	Ft.	Ins.	S.D. Ins.
Entrants	441	3	6.46	2.84	392	3	6.21	2.46
2nd Age Group	986	4	1.04	2.58	1018	4	1.01	2.58
3rd Age Group	772	4	8.65	2.73	702	4	9.38	3.20
4th Age Group	728	4	11.33	3.45	627	5	0.14	3.31

Group	Weight							
	Boys				Girls			
	No.	St.	Lbs.	S.D. Lbs.	No.	St.	Lbs.	S.D. Lbs.
Entrants	448	3	0.62	5.35	401	2	13.43	6.00
2nd Age Group	994	3	14.40	7.10	1024	3	13.11	7.62
3rd Age Group	779	5	8.72	11.26	710	5	11.53	13.53
4th Age Group	730	6	6.72	15.52	628	6	10.93	15.27

Classes for stammering children.—In addition to the quarterly visits paid to these classes by the Assistant Medical Officers, one examination was made, covering a total of 60 children, with a view to admission to or withdrawal from these classes.